

CONTENTS OF VOLUME 39

Number 1

- 1 Chemical synthesis of an amylose-like polysaccharide by polymerization of partially benzylated phenyl 1-thio- β -maltooctaoside derived from γ -cyclodextrin
M. NISHIKI, Y. OUSAKA, N. NISHI, S. TOKURA & N. SAKAIRI (JAPAN)
- 7 Amino acids as plasticizers. II. Use of quantitative structure-property relationships to predict the behavior of monoammoniummonocarboxylate plasticizers in starch–glycerol blends
T. M. STEIN, S. H. GORDON & R. V. GREENE (USA)
- 17 Cyclodextrin derivative of hyaluronan
L. ŠOLTÉS (SLOVAK REPUBLIC), R. MENDICHI (ITALY), E. MACHOVÁ, B. STEINER, J. ALFÖLDI, V. SASINKOVÁ, S. BYSTRICKÝ & K. BALOG (SLOVAK REPUBLIC)
- 25 Aqueous starch–oil dispersions prepared by steam jet cooking. Starch films at the oil–water interface
G. F. FANTA, F. C. FELKER, K. ESKINS & F. L. BAKER (USA)
- 37 Starch–alcohol complexes
E. POLACZEK, F. STARZYK & P. TOMASIK (POLAND)
- 43 Ageing of rubbery thermoplastic barley and oat starches
P. M. FORSELL (FINLAND), S. H. D. HULLEMAN (THE NETHERLANDS), P. J. MYLLÄRINEN (FINLAND), G. K. MOATES & R. PARKER (UK)
- 53 Dynamic viscoelasticity and small-angle X-ray scattering studies on the gelation mechanism and network structure of curdlan gels
T. TADA, T. MATSUMOTO & T. MASUDA (JAPAN)
- 61 Production of endo-1,4- β -D-glucanase by *Curvularia pallescens*
S. V. P. FREIRE, M. P. C. DA SILVA, E. A. DE LUNA-ALVES LIMA, L. C. MAIA (BRAZIL) & J. F. KENNEDY (UK)
- 67 Phase separation and rheology of aqueous starch/galactomannan systems
C. B. CLOSS, B. CONDE-PETIT, I. D. ROBERTS, V. B. TOLSTOGUZOV & F. ESCHER (SWITZERLAND)
- 79 Control of unsaturated fatty acid substituents in emulsans
A. GORKOVENKO, J. ZHANG, R. A. GROSS & D. L. KAPLAN (USA)
- 85 Book Reviews
- 89 Erratum
- 93 Bibliography
- 99 Calendar

Number 2

- 101 Compositional and structural modification of the cell wall of cauliflower (*Brassica oleracea* L. var *botrytis*) during tissue development and plant maturation
A. FEMENIA, K. W. WALDRON, J. A. ROBERTSON & R. R. SELVENDRAN (UK)
- 109 Compositional features of polysaccharides from Aloe vera (*Aloe barbadensis* Miller) plant tissues
A. FEMENIA, E. S. SÁNCHEZ, S. SIMAL & C. ROSSELLO (SPAIN)
- 119 Thermomechanical depolymerization of dextran
G. L. COTE & J. L. WILLET (USA)
- 127 Chemical modification of chitin and chitosan 2: preparation and water soluble property of *N*-acylated or *N*-alkylated partially deacetylated chitins
H. SASHIWA & Y. SHIGEMASA (JAPAN)
- 139 Thermal and viscoelastic properties of alginate/poly(vinyl alcohol) blends cross-linked with calcium tetraborate
K. MIURA, N. KIMURA, H. SUZUKI, Y. MIYASHITA & Y. NISHIO (JAPAN)
- 145 Electric resistance of chitosan derivatives
K. SUZUKI, H. SAIMOTO & Y. SHIGEMASA (JAPAN)
- 151 Investigation of the occurrence of pectic-xylan–xyloglucan complexes in the cell walls of cauliflower stem tissues
A. FEMENIA, N. M. RIGBY, R. R. SELVENDRAN & K. W. WALDRON (UK)
- 165 Isolation, characterisation, and NMR study of xyloglucan from enzymatically depectinised and non-depectinised apple pomace
D. K. WATT, D. J. BRASCH, D. S. LARSEN & L. D. MELTON (NEW ZEALAND)
- 181 Properties of cassava starch–dicarboxylic acid complexes
J. K. JOHN & K. C. M. RAJA (INDIA)
- 187 Book Reviews
- 191 Bibliography
- 199 Calendar

Number 3

- 201 Acetylation and methylation of homogalacturonans 1: optimisation of the reaction and characterisation of the products
C. M. G. C. RENARD (UK) (FRANCE) & M. C. JARVIS (UK)
- 209 Acetylation and methylation of homogalacturonans 2: effect on ion-binding properties and conformations
C. M. G. C. RENARD & M. C. JARVIS (UK)
- 217 Removal of heavy metal ions from water by cross-linked carboxymethyl corn starch
B. S. KIM & S.-T. LIM (S. KOREA)
- 225 Enzyme immunoassay system for estimating the ultrastructure of (1,6) branched (1,3)- β -glucans
Y. ADACHI, N. N. MIURA, N. OHNO, H. TAMURA, S. TANAKA & T. YADOMAE (JAPAN)
- 231 In situ observation of pressure-induced gelation of starches studied with FTIR in the diamond anvil cell
P. RUBENS, J. SNAUWAERT, K. HEREMANS (BELGIUM) & R. STUTE (GERMANY)
- 237 Chemical modification of chitin and chitosan 1: preparation of partially deacetylated chitin derivatives via a ring-opening reaction with cyclic acid anhydrides in lithium chloride/*N,N*-dimethylacetamide
Y. SHIGEMASA, H. USUI, M. MORIMOTO, H. SAIMOTO, Y. OKAMOTO, S. MINAMI & H. SASHIWA (JAPAN)

- 245 A sulfated chitin inhibits hemagglutination by *Theileria sergenti* merozoites
K. HAGIWARA, Y. KURIBAYASHI, H. IWAI, I. AZUMA, S. TOKURA, K. IKUTA & C. ISHIHARA (JAPAN)
- 249 Scleroglucan gel volume changes in dimethylsulphoxide/water and alkaline solutions are partly caused by polymer chain conformational transitions
B. GUO, A. ELGSAETER & B. T. STOKKE (NORWAY)
- 257 Antigenic epitope for polyclonal antibody against a complement activating pectin from the roots of *Angelica acutiloba* Kitagawa
N.-L. WANG, H. KIYOHARA, M. H. SAKURAI & H. YAMADA (JAPAN)
- 265 Oxidative gelation of sugar-beet pectins: use of laccases and hydration properties of the cross-linked pectins
V. MICARD & J.-F. THIBAUT (FRANCE)
- 275 Viscoelastic properties of aqueous solutions of the phosphopolysaccharide "viilian" from *Lactococcus lactis* subsp. *cremoris* SBT 0495
T. OBA, M. HIGASHIMURA, T. IWASAKI, A. M. MATSER, P. A. M. STEENEKEN, G. W. ROBIJN & J. SIKKEMA (THE NETHERLANDS)
- 283 Chemical reaction on polysaccharides V. Pullulan chloroalkylation
G. MOCANU, D. VIZITIU, D. MIHAI & A. CARPOV (ROMANIA)
- 289 Book Reviews
- 293 Calendar
- 295 Bibliography

Number 4

- 303 The effect of mutant genes at the *r*, *rb*, *rug3*, *rug4*, *rug5*, and *lam*, loci on the granular structure and physico-chemical properties of pea seed starch
T. Y. BOGRACHEVA, P. CAIRNS, T. R. NOEL (UK), S. HULLEMAN (THE NETHERLANDS), T. L. WANG, V. J. MORRIS, S. G. RING & C. L. HEDLEY (UK)
- 315 The hydrodynamic characterization of waxy maize amylopectin in 90% dimethyl sulfoxide–water by analytical ultracentrifugation, dynamic, and static light scattering
M. M. MILLARD, W. J. WOLF, F. R. DINTZIS & J. L. WILLETT (USA)
- 321 Arabinoxylan fractionation on DEAE-cellulose chromatography influenced by protease pre-treatment
M. NILSSON, R. ANDERSSON & P. ÅMAN (SWEDEN)
- 327 Crystallinity and structuring role of water in native and recrystallized starches by ¹³C CP-MAS NMR spectroscopy. 1: Spectral decomposition
M. PARIS, H. BIZOT, J. EMERY, J. Y. BUZARÉ & A. BULÉON (FRANCE)
- 341 Modification of cell-wall polymers of onion waste III. Effect of extrusion-cooking on cell-wall material of outer fleshy tissues
A. NG, S. LECAIN, M. L. PARKER, A. C. SMITH & K. W. WALDRON (UK)
- 351 Origins of B-type crystallinity in glycerol-plasticised, compression-moulded potato starches
S. H. D. HULLEMAN, M. G. KALISVAART, F. H. P. JANSSEN, H. FEIL & J. F. G. Vliegenthart (THE NETHERLANDS)
- 361 6-Oxychitins, novel hyaluronan-like regiospecifically carboxylated chitins
R. A. A. MUZZARELLI, C. MUZZARELLI, A. COSANI & M. TERBOJEVICH (ITALY)
- 369 Characterisation of extracellular polysaccharides from suspension cultures of apple (*Malus domestica*)
S. REID, I. M. SIMS (AUSTRALIA), L. D. MELTON & A. M. GANE (NEW ZEALAND)

- 377 A simple and rapid method for evaluation of Mark–Houwink–Sakurada constants of linear random coil polysaccharides using molecular weight and intrinsic viscosity determined by high performance size exclusion chromatography: application to guar galactomannan
M. U. BEER, P. J. WOOD & J. WEISZ (CANADA)
- 381 Book Reviews
- 385 Calendar
- 387 Bibliography
- 391 Contents of Volume 39